III. The Commission Should Refine its Definition of Dark Fiber

In the *UNE Remand Order*, the Commission defined dark fiber as "deployed, unlit fiber optic cable that connects two points within the incumbent LECs network."[127] The Commission now seeks comments as to whether, *inter alia,* it should modify its dark fiber unbundling requirements or the existing definition of the dark fiber UNE.[128] Further, the Commission seeks comment as to "the proper roles of state commissions in the implementation of unbundling requirements for incumbent LECs."[129] Finally, the Commission asserts that in this proceeding it "intend[s] to build on the experience of all participants in the telecommunications industry with [the Commission's] existing rules."[130] In sum, the Commission seeks comment on its existing unbundling rules in order to benefit from the three or more years of experience of state commissions and carriers with these rules in order to "develop specific requirements concerning incumbent LEC's obligations to unbundle and provide access to network elements" going forward.[131]

Accordingly, the Dark Fiber Commenters maintain that the Commission should retain dark fiber loops, subloops and transport as UNEs, refine its existing definitions of the dark fiber UNEs, and modify its dark fiber rules to benefit from the valuable experience gleaned by the state commissions in implementing the dark fiber UNEs. The Commission should adopt the best practices of the state commissions and codify these practices in national loop, subloop, dedicated

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127 *UNE Remand Order*, at ¶ 325.

128 *Triennial UNE NPRM*, at ¶ 61.

129 *Triennial UNE NPRM*, at ¶ 75.

130 *Triennial UNE NPRM*, at ¶ 47.

131 *UNE Remand Order*, at ¶ 47.

transport, OSS and dark fiber unbundling rules that serve as minimum unbundling obligations for ILECs that may be supplemented, but not diminished, by state commissions.

As noted by the Commission in the *UNE Remand* Order, a "guaranteed list of network elements provides enough certainty to allow [CLECs] to develop and implement regional and national business plans" and also benefits facilities-based competition "by enabling competitors to raise capital at lower costs to create and enhance their networks."[132] The Commission should adopt the best practices of the state commissions regarding unbundled dark fiber in a set of national minimum dark fiber unbundling requirements that state commissions may augment (but not diminish) in order to reduce the material impairment requesting carriers currently face in deploying services (as demonstrated in Section II above) by ensuring that dark fiber loops, subloops, and transport are more widely available to requesting carriers.

More specifically, the Commission should refine its definition of dark fiber and adopt terms and conditions consistent with the best practices of the state commissions because ILECs have consistently evaded their obligation to provide unbundled dark fiber by inventing loopholes whenever the Commission has not directly and unambiguously addressed an issue. For example, ILECs have in general refused to allow CLECs to access dark fiber at splice points and at intermediate offices where the CLEC does not have a collocation arrangement, unless specifically ordered to do so by a state commission, notwithstanding the fact that such access is clearly technically feasible and thus mandated by Section 251(c)(3) of the Act and the

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[132] *UNE Remand Order*, at ¶¶ 158-159.

Commission's existing rules. Additionally, Verizon, SBC[133] and other ILECs have imposed dark fiber terms, conditions and practices regarding, among other things, access to unterminated dark fiber, inventory of dark fiber, access to pre-ordering information regarding dark fiber and information regarding the route and path of dark fiber, splicing of dark fiber, and responses to CLEC dark fiber requests that are also unreasonable, because as a practical matter, they provide these ILECs with unlimited discretion to severely limit the quantity of unbundled dark fiber and routes that are deemed by the ILECs to be available to CLECs. Further, ILECs have refused to perform meaningful cooperative testing and have refused to implement industry standards in the provisioning of dark fiber to CLECs.

The ILECs have imposed unreasonable and discriminatory dark fiber terms and conditions that have significantly reduced the availability of dark fiber and have materially impaired the ability of requesting carriers to offer services. For example, as a result of Verizon's highly restrictive policies in Maine, dark fiber is very rarely available when a CLEC requests it. In fact, between January 2000 and September 30, 2001, Verizon received a total of 134 CLEC dark fiber inquiries in Maine and determined that dark fiber was not available in 100 of 134 instances.[134] This constitutes a staggering unavailability rate of 75%.[135] Even worse, in Vermont, Verizon rejected 23 of 26 CLEC dark fiber inquiries between January 2000 and

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133 The term "SBC" is used to refer to SBC Communications and its affiliates, including Southwestern Bell Telephone Company.

134 Exhibit-01, Maine Docket No. 2000-849, *Inquiry Regarding the Entry of Verizon-Maine Into the InterLATA (Long Distance) Telephone Market Pursuant to Section 271 of the Telecommunications Act of 1996*, Verizon's Responses to CTC's First Set of Data Requests, dated Nov. 8, 2001, Responses VZ# 243 and 243 ("*Verizon's Responses to Data Requests in Maine 271*").

135 *Id.*

September 2001 for an even more staggering unavailability rate of 88%.[136] In contrast, during a similar time period, the dark fiber unavailability rate in Massachusetts, where the state commission has forced Verizon to adopt more reasonable and non-discriminatory dark fiber policies regarding among other items access to dark fiber at splice points, access to dark fiber at intermediate offices without collocation, and maintenance spares, was only 35%.[137]

The unreasonableness of the terms and practices regarding dark fiber that the ILEC's impose through their general policies, tariffs, standard interconnection agreements, and intransigent negotiating positions is especially evident when contrasted with the far more reasonable terms and practices that ILECs have implemented or are in the process of implementing in Massachusetts, Maine, New Hampshire, New Jersey, Rhode Island, the District of Columbia, Texas and Indiana at the behest of state commissions. In light of the best practices adopted by these state commissions, the Commission should supplement its rules regarding dark fiber to constrain an ILEC's ability to limit the quantity of dark fiber that is deemed available by the ILEC to requesting carriers.

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[136] Exhibit-01, Vermont Docket No. 6533, *Application of Verizon New England, Inc. d/b/a Verizon Vermont for a Favorable Recommendation to Offer InterLATA Services Under 47 U.S.C. § 271*, Verizon's Responses to CTC's First Set of Data Requests, dated Sept. 11, 2001, Response VZ# 182 ("*Verizon's Responses to Data Requests in Vermont 271*"); *In the Matter of Application by Verizon New England, Inc. et al., for Authorization to Provide In-Region, InterLATA Services in Vermont*, CC Docket No. 02-7, Comments of CTC Communications Corp., at 20 (filed Feb. 6, 2002).

[137] *In the Matter of Application by Verizon New England, Inc. et al., for Authorization to Provide In-Region, InterLATA Services in Vermont*, CC Docket No. 02-7, Comments of CTC Communications Corp., at 20 (filed Feb. 6, 2002).

A. The Commission should Clarify that ILECs Are Required to Provide Dark Fiber At Any Technically Feasible Point Including Splice Points And At Intermediate Offices Where a CLEC Does Not Have A Collocation Arrangement

1. ILECs Are Required Under the Act and the Commission's Existing Rules To Provision Dark Fiber Through Intermediate Offices Without Requiring a Collocation Arrangement At Each Intermediate Office

Contrary to the unambiguous language of Section 251(c)(3) of the Act and Commission Rules 51.307(a) and 51.319(a) and (d), ILECs routinely refuse to provide access to dark fiber loop and transport network elements at "any technically feasible point" as required by Section 251(c)(3), Commission rules and the *UNE Remand Order*.[138] For example, Verizon has established a general policy of refusing to provision unbundled dark fiber transport through intermediate central offices when direct routes are not available, unless the CLEC establishes a collocation arrangement in each intermediate central office. More specifically, as a matter of general policy, Verizon provides dark fiber transport only "on a route-direct basis" where at least one end of the dark fiber transport terminates at a Verizon accessible terminal in a Verizon central office that can be cross-connected to the CLEC's collocation arrangement in that central office.[139] Verizon steadfastly imposes this general policy across its operating territory through its tariffs, interconnection agreements, and negotiating positions, except where the issue has been litigated and a state commission has directly ordered Verizon to provide such access to

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[138] 47 U.S.C. § 251(c)(3); 47 C.F.R. §§ 51.307(a), 51.319(a) and (d). The Dark Fiber Commenters acknowledge that the Commission created an exception for subloops such that ILECs are only required to provide subloops, including subloop dark fiber, at an "accessible terminal" which "is a point on the loop where technicians can access the wire or fiber within the cable without removing the splice case to reach the wire or fiber within." *UNE Remand Order*, at ¶ 206. This restriction regarding subloops should be removed by the FCC and in any event never was intended to apply to dark fiber loops and transport as claimed by some ILECs.

[139] Exhibit-02, Verizon's Proposed Interconnection Agreement, §§ 8.2, 8.3, 8.4, 8.5.1, 8.5.2, and 8.5.3.

unbundled dark fiber. Verizon stubbornly maintains this general policy despite the fact that state commissions in Massachusetts, Maine, New Jersey and Rhode Island have examined the issue and have determined that it is technically feasible for Verizon to provision dark fiber through one or more intermediate central offices without requiring the CLEC to be collocated at any such intermediate offices.[140]

In fact, the New Jersey Board of Public Utilities ("NJ Board") recently concluded that Verizon's collocation requirement is not only unlawful, but also wasteful because the collocation requirement "needlessly inflates the cost of providing service to CLECs."[141] Accordingly, the NJ Board directed Verizon to permit CLECs "to route dark fiber through intermediary central offices without the need to establish collocation facilities in each central office using cost-based cross connections."[142] Likewise, in Massachusetts, Verizon is required to perform splicing to join fibers at existing splice points and collocation is not required to access dark fiber.[143] In Maine, the state commission determined that Verizon must "provision continuous dark fiber through one or more intermediate central offices without requiring the CLEC to be collocated at

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[140] *See, e.g., Inquiry Regarding the Entry of Verizon-Maine into the InterLATA Telephone Market Pursuant to Section 271 of the Telecommunications Act of 1996*, Docket No. 2000-849, Letter of Dennis L. Keshl, at 3 (March 1, 2002) ("Maine Section 271 Conditions").

[141] *In the Matter of the Board's Review of Unbundled Network Elements, Rates, Terms, and Conditions of Bell Atlantic-New Jersey, Inc.*, Docket No. TO00060356, Decision and Order, at 247-248 (N.J. Board of Public Utilities, Nov. 20, 2001) ("*NJ Dark Fiber Order*").

[142] *NJ Dark Fiber Order*, at 247-248.

[143] Mass. DTE Phase 4N Order, at 33 (Verizon cannot impose a collocation requirement for access to dark fiber); Exhibit-03, Verizon New England, Inc. Rates and Charges in the Commonwealth of Massachusetts, DTE MA Tariff No. 17, Miscellaneous Network Services, Part B, §17.2.1.B ("Mass. DTE No. 17"); Exhibit-04, Verizon's Unbundled Dark Fiber Service Description, Aug. 31, 2000, at ¶¶ 1.1, 1.2, 1.15 and 1.16 ("Mass. Service Description") ("In the case of interconnection at an existing splice point, Verizon-MA, using current Verizon-MA approved splicing methods, will connect to a fiber optic cable provided, installed and maintained by the CLEC."). The provisions of Verizon's Massachusetts DTE Tariff No. 17 regarding dark fiber unbundled network elements are (Cont'd)

any such [intermediate] offices."[144] Additionally, the Rhode Island PUC recently ordered Verizon to "splice dark fiber at any technically feasible point so as to make dark fiber continuous through one or more intermediate central offices without requiring a CLEC to be collocated at any such intermediate offices."[145] In reaching its decision, the Rhode Island PUC noted that "this policy will significantly benefit CLECs by lowering the costs to establish their networks by reducing the number of central offices at which CLECs must collocate."[146]

Despite the obvious technical feasibility of providing cross connects at intermediate wire centers as exemplified by the best practices ordered in Massachusetts, Maine, New Jersey, Rhode Island, and other states, Verizon and other ILECs continue to require collocation in each central office for access to dark fiber in the absence of direct commission action. As a result of these unreasonable ILEC policies, dark fiber routes are often unavailable to requesting CLECs and CLECs are impaired in their ability to offer services. ILEC policies precluding the splicing of dark fiber and limiting access to dark fiber at intermediate offices are inconsistent with the plain meaning of Section 251(c)(3) of the Act, which requires ILECs to provide dark fiber on "reasonable" terms and at "any technically feasible point." The Commission should preclude ILECs from imposing such unreasonable terms by clarifying in this proceeding that consistent with the Act, ILECs must splice dark fiber for CLECs and provide access to dark fiber at

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attached herein as Exhibit-03. Verizon's Mass. Service Description, which describes its dark fiber unbundled network element offering as submitted to the Massachusetts DTE, is attached herein as Exhibit-04.

144 *Maine Section 271 Conditions*, at 3.

145 *RI Dark Fiber Order*, at 19, 22-23.

146 *RI Dark Fiber Order*, at 22.

intermediate offices without requiring requesting carriers to collocate in the intermediate central offices.

2. Access to Dark Fiber At Splice Points Is Technically Feasible And Required Under the Act and the Commission's Existing Rules

As a matter of general policy, Verizon and SBC refuse to provide access to unbundled dark fiber at splice points, except where the issue has been litigated and a state commission has directly ordered the ILEC to provide such access to unbundled dark fiber.[147] More specifically, Verizon refuses to "open existing splice points" and perform splicing upon a CLECs request in order to make a strand "continuous" and available for unbundling.[148] Moreover, contrary to the conclusions of several state commissions, the extensive experience of SBC with splicing, and most importantly its own experience, Verizon continues to assert that access to dark fiber at splice points is not technically feasible and therefore not required under Section 251(c)(3) of the Act.[149]

Verizon's assertion that access to dark fiber at existing splice points is not technically feasible is, however, belied by Verizon's admission that it performs such splicing for itself,[150] and the fact that other ILECs, including SBC, routinely perform such splicing for themselves.

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147 *See, e.g.*, Exhibit-05, *Petition of El Paso Networks, LLC For Arbitration Of An Interconnection Agreement With Southwestern Bell Telephone Company*, Docket No. 25188, Direct Testimony of Robert Passmore, at 5 (TX PUC, March 8, 2002) ("Passmore Direct Testimony") ("SWBT has taken the position that it will not splice any dark fiber.").

148 *See, e.g.*, Exhibit-03, Verizon's Proposed Interconnection Agreement, §§ 8.5.2, 8.5.3 ("A strand shall not be deemed continuous if splicing is required to provide fiber continuity between two locations.").

149 *See, e.g., In the Matter of the Board's Review of Unbundled Network Elements Rates, Terms and Conditions of Bell-Atlantic – New Jersey, Inc.*, Decision and Order, Docket No. TO00060356, at 236-237 (rel. March 6, 2002) ("*NJ Dark Fiber Order*").

150 Exhibit-06, Maine Section 271 Transcript, Jan. 29, 2002, at 192:3-5; 196:24-197:1 ("Maine Section 271 Transcript").

Verizon has also admitted that the physical work required to perform splicing for a CLEC is the same as it performs for itself.[151] Further, SBC performs such splicing for itself, its affiliates and its subsidiaries, and continues to splice fiber for EPN in Texas pursuant to state commission orders to maintain the status quo, which proves that such access is technically feasible.[152]

Most importantly, several state commissions, including those in the District of Columbia,[153] Indiana,[154] Massachusetts, New Hampshire[155] and Rhode Island[156] have examined the issue and have dismissed Verizon's arguments regarding splicing of unbundled dark fiber, including the argument that such splicing is not technically feasible, and have ordered Verizon to splice dark fiber for requesting CLECs.[157] For example, the MA DTE dismissed the arguments raised by Verizon regarding the technical feasibility of resplicing dark fiber and concluded "that it is *technically feasible* and *consistent with industry practice* to lease dark fiber at splice

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[151] Exhibit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 195:8-24 ((Albert) "If you're doing fusion splicing of Verizon fibers to Verizon fibers, that would be the same as fusion splicing CLEC fibers to Verizon fibers.").

[152] Exhibit-05, Passmore Direct Testimony, at 5 ("Over the last three years, SWBT has spliced loop fibers routinely for EPN, a service without which EPN could not have built its existing telecommunications business in Texas.").

[153] *D.C. Dark Fiber Order*, at ¶ 62, 87.

[154] *Re: AT&T Communications of Indiana, Inc.*, Cause No. 40571-INT-03, Slip Opinion, at 79, 129-130 (Nov. 20, 2000) ("Indiana Order").

[155] *Re: Deliberations in DT 01-206 Regarding Rates, Terms and Conditions for the UNE Remand Unbundled Network Elements*, Policy Letter, at 2 (N.H. PUC, March 1, 2002).

[156] *In re: Verizon-Rhode Island's TELRIC Studies – UNE Remand*, Docket No. 2681, Report and Order, at 19, 22-23 (Rhode Island PUC, Dec. 3, 2001) ("*RI Dark Fiber Order*") ("Verizon is required to splice dark fiber at any technically feasible point on a time and materials basis, so as to provision continuous dark fiber through one or more intermediate central offices without requiring the CLEC to be collocated at any such offices."); Jan. 29, 2002 Tr. at 18:21-186:3.

[157] It should be noted that the Joint Dark Fiber Commenters are not advocating that CLEC's technicians be permitted to access splice points on ILEC-owned fiber.

points."[158] In fact, the MA DTE concluded that Verizon itself resplices "from time to time" and that those "splice points are designated for [Verizon], itself, to use as junction points in its network."[159] Accordingly, the MA DTE saw "little distinction between a splice performed on behalf of [Verizon] and that performed for another carrier" and ordered Verizon to provide access to dark fiber at any technically feasible point including existing splice points as well as hard termination points.[160] The MA DTE required Verizon to perform splicing at the CLEC's request in order to make a fiber strand "continuous by joining fibers at existing splice points within the same sheath."[161]

The District of Columbia Public Service Commission ("DC PSC") recently [162] observed that the Indiana commission and MA DTE permit access to dark fiber at splice points[163] and in light of this precedent and other analysis, concluded that Verizon must provide access to dark fiber at splice points.[164] After CTC raised these same issues in the Rhode Island Section 271

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158 *New England Telephone and Telegraph Company d/b/a Bell Atlantic Massachusetts*, Decision D.P.U./D.T.E. 96-83, 96-94-Phase 4-N, at 33 (Mass. DTE Dec. 13, 1999) ("We impose no collocation requirement . . . it is technically feasible and consistent with industry practice to lease dark fiber at splice points.") ("*Mass. DTE Phase 4N Order*") (emphasis added); *New England Telephone and Telegraph Company d/b/a NYNEX, et al.*, Decision D.P.U. 96/73-74, 96/80-81, 96-84-Phase 4-R Order at 4-5 (Mass. DTE Aug. 17, 2000).

159 *New England Telephone and Telegraph Company d/b/a NYNEX*, Decision D.P.U./D.T.E. 96-73/74, 96-75, 96-80/81, 96-83, 96-94-Phase 3, at 48-49 (Mass. DTE Dec. 4, 1996) ("*Mass. DTE Phase 3 Order*").

160 *Mass. DTE Phase 3 Order*, at 48.

161 Exhibit-03, Mass. DTE No. 17, Miscellaneous Network Services, Part B, § 17.1.1.A.1; *Mass. DTE Phase 4N Order*, at 33 ("We impose no collocation requirement . . . it is technically feasible and consistent with industry practice to lease dark fiber at splice points."); *D.C. Dark Fiber Order*, at ¶ 62, 87.

162 *TAC 12 – Petition of Yipes Transmission, Inc. for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Verizon Washington, DC, Inc.*, Order No. 12286, Order on Reconsideration, at ¶ 57 (DC PSC Jan. 4, 2002) ("*D.C. Dark Fiber Order*").

163 *D.C. Dark Fiber Order*, at ¶ 61.

164 *D.C. Dark Fiber Order*, at ¶ 62, 74, 87.

proceeding, the Rhode Island PUC, following the lead of the Massachusetts DTE, ordered Verizon to "*splice* dark fiber at any technically feasible point so as to make dark fiber continuous through one or more intermediate offices *without requiring the CLEC to be collocated at any such intermediate offices.*"[165]

Finally, on March 1, 2002, the New Hampshire Public Utilities Commission ("NH PUC") underscored its view that "Dark Fiber is an important resource for promoting competition and encouraging broadband deployment in New Hampshire," and decided to "adopt the Massachusetts DTE determination that access to existing splice points is technically feasible."[166] Accordingly, Verizon is now required to provide access to dark fiber at existing splice points in New Hampshire.

Verizon is not alone in unlawfully refusing to provide access to dark fiber at splice points. Other ILECs including for example, SBC have refused to provide access to dark fiber at splice points. In fact, SBC recently informed EPN during interconnection negotiations that although it has spliced dark fiber for EPN since May, 1999, it believes it is not required to do so and will refuse to splice dark fiber for EPN and other CLECs in the future.[167] The Texas Public Utilities Commission ("TX PUC"), however, has directed SBC to continue to splice dark fiber

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[165] *In re: Verizon-Rhode Island's TELRIC Studies – UNE Remand*, Docket No. 2681, Report and Order, at 19, 22-23 (Rhode Island PUC, Dec. 3, 2001) (emphasis added).

[166] *Re: Deliberations in DT 01-206 Regarding Rates, Terms and Conditions for the UNE Remand Unbundled Network Elements*, Policy Letter, at 2 (March 1, 2002).

[167] In Docket No. 20268, SBC voluntarily agreed to spliced dark fiber for EPN starting in May of 1999. SBC subsequently renounced this policy three years later. Exhibit-05, Passmore Direct Testimony, at 5, 12, 16, 29, 22 ("SWBT's position is that it would refuse to provide the necessary splicing or to allow EPN to perform the splicing itself."). From May 1999 until recently, SBC spliced approximately 300 fibers for EPN. Exhibit-05, Passmore Direct Testimony, at 20, 22.

for EPN, as it had agreed to do in 1999, pending the outcome of an arbitration between the parties.[168]

SBC is precluded from arguing that splicing of dark fiber for CLECs is not technically feasible because SBC performed over 300 splices of dark fiber for EPN over a three-year period prior to instituting its no-splicing policy.[169] No significant network reliability problems have occurred as a result of the past splicing performed by SBC on behalf of EPN in Texas.[170] Moreover, SBC has teams of technicians in place that routinely open existing splice cases that house lit fiber in order to splice unterminated fibers, add new cables, and rearrange existing spliced fibers for use by SBC in serving its customers.[171] Moreover, because of SBC's past provisioning of dark fiber splicing to EPN, the ordering, billing, and provisioning procedures needed to perform such splicing on behalf of CLECs are in place, and are functioning.[172] Other ILECs and other carriers also regularly perform splices on dark fiber for themselves and affiliates. SBC's past experience in performing dark fiber splicing for CLECs, and the fact that Verizon, SBC and other ILECs perform such splicing for themselves, unequivocally

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168 *Complaint and Request for Interim Ruling of El Paso Networks, LLC for Post Interconnection Agreement Dispute Resolution With Southwestern Bell Telephone Company*, Docket No. 25188, Order No. 8 Granting El Paso Network, LLC's Request for Emergency Relief To Preserve the Status Quo, at 2 (Feb. 28, 2002) ("EPN shall continue to pay SWBT for splicing at the current rates set by SWBT, therefore the Arbitrators do not anticipate any harm to SWBT if it continues to splice dark fiber for EPN. Therefore, the Arbitrators order SWBT to maintain the status quo and continue splicing unbundled dark fiber for EPN on the same terms as it has done to date.").

169 Exhibit-05, Passmore Direct Testimony, at 20, 22.

170 Exhibit-05, Passmore Direct Testimony, at 20-22.

171 Exhibit-05, Passmore Direct Testimony, at 13-14.

172 Exhibit-05, Passmore Direct Testimony, at 14, 17.

demonstrates that access to unbundled dark fiber at splice points is technically feasible and should be available to requesting carriers on a nationwide basis as required by the Act.[173]

In sum, Verizon's and SBC's refusal to splice dark fiber on behalf of requesting CLECs violates Section 251(c)(3) of the Act, Commission Rules 51.307(a), 51.319(a) and (d), and the *UNE Remand Order*. Further, Verizon's and SBC's refusal to splice dark fiber violates the requirement of Section 251(c)(3) that they provide "nondiscriminatory access to network elements" because these ILECs splice dark fiber for themselves and affiliates while refusing to splice dark fiber for CLECs. Accordingly, the Commission should supplement its unbundling rules to clarify that ILECs are obligated to provide nondiscriminatory access to unbundled dark fiber loops and transport at any technically feasible point including splice points.

3. The Availability of Unbundled Dark Fiber Loops And Transport Is Materially Diminished Without Splicing

Without access to dark fiber at splice points, a significant percentage of ILEC dark fiber loops and transport will be available to ILECs but not to CLECs. This is especially true in the case of the bottleneck "last mile" facilities where unlit fibers are typically not spliced and terminated by ILECs until they are needed by the ILEC for their own use. Consequently, unbundled "last mile" dark fiber is often not available to CLECs without at least some splicing. Unless ILECs are required to perform such splicing for CLECs they can continue to leave dark fiber that has been pulled within or lies just outside the central office at a manhole or other location, unspliced and unterminated in order to reduce the dark fiber inventory that is available

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[173] *See, e.g.*, Exhibit-05, Passmore Direct Testimony, at 14.

to CLECs. In fact, as discussed more fully below, Verizon and SBC often engage in this very practice by leaving loop dark fiber unspliced and unterminated.[174]

Further, EPN's prior experience with obtaining dark fiber from SBC in Texas illustrates that SBC's refusal to splice dark fiber would exclude a significant percentage of SBC's dark fiber facilities from unbundling.[175] Specifically, of the actual dark fiber service orders submitted by EPN to SBC since 1999, a significant percentage of the dark fiber loops required splicing at least one point in the path of the fiber to provide EPN with a continuous fiber loop. If SBC had not been required to splice dark fiber loops for EPN, then the percentage of dark fiber loops that would have been unavailable to EPN in the following major Texas markets is as follows:

Austin	47%
Dallas	72%
Fort Worth	55%
Houston	60%
San Antonio	66%[176]

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[174] *See, e.g.*, Exhibit-05, Passmore Direct Testimony, at 6-7, 11-12 ("when SWBT deploys fiber optic cable in the field between a Central Office and a building, it regularly designs breaks in the path at various points" and "the individual fiber strands on deployed but unused fibers are typically not interconnected until SWBT needs the individual strands to provision service."); Exhibit-01, Maine Docket No. 2000-849, *Inquiry Regarding the Entry of Verizon-Maine Into the InterLATA (Long Distance) Telephone Market Pursuant to Section 271 of the Telecommunications Act of 1996*, Verizon's Responses to CTC's First Set of Data Requests, dated Nov. 8, 2001, Responses VZ# 230 and 291.

[175] Exhibit-05, Passmore Direct Testimony, at 10.

[176] Exhibit-05, Passmore Direct Testimony, at 10; Exhibit-12, Declaration of Patricia Hogue, at ¶ 3; *Complaint and Request for Interim Ruling of El Paso Networks, LLC for Post Interconnection Agreement Dispute Resolution with Southwestern Bell Telephone Company*, Docket No. 25004, *Petition of El Paso Networks, LLC for Arbitration of an Interconnection Agreement with Southwestern Bell Telephone Company*, Docket No. 25188, Request for the Presiding Officer to Take Emergency Action Under Procedural Rule 22.78(C) and Preserve the Status Quo, at Ex.-D, p. 2-3 (Tex. P.U.C. Feb. 26, 2002).

In view of the frequency with which splicing was required, it is clear that, if splicing had not been available, EPN could not have undertaken a successful business plan that relied on dark fiber in any of these markets. Moreover, in the future, SBC and other ILECs could eliminate their dark fiber unbundling obligations altogether simply by leaving all dark fibers not in use unspliced in at least one location.

(a) Termination of Dark Fiber Often Involves Splicing

As noted above, unlit fibers in the crucial "last mile" are typically not spliced end-to-end and terminated by ILECs until they are needed by the ILEC for their own use. Consequently, unbundled "last mile" dark fiber is often not available to CLECs without splicing at one or more locations.[177] Splicing of fiber occurs regularly for a number of reasons. First, SBC and other ILECs routinely perform a fusion splice to connect a fiber pigtail to a fiber cable in a splice tray within the central office in order to terminate the fiber cable at a fiber distribution panel. In short, termination of fiber often involves the same splicing operation as a splice performed at a manhole.[178] This type of splicing is routinely performed in a controlled environment by ILECs to serve their own customers and should be performed to provide dark fiber loops and transport to CLECs.[179] Such splicing does not implicate any network reliability issues as evidenced by the fact that ILECs routinely perform such splicing for themselves. Unless ILECs are required to perform such splicing for CLECs they can leave dark fiber that has been pulled within or lies just outside the central office or customer location unspliced and unterminated in order to reduce the

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177 Exhibit-05, Passmore Direct Testimony, at 6, 11-12.

178 Exhibit-05, Passmore Direct Testimony, at 17-18.

179 *Id.*

dark fiber inventory that is available to CLECs.[180] In fact, SBC admits that it frequently leaves fiber unspliced at the customer location which has the effect of reducing the dark fiber available to CLECs.[181]

(b) ILECs Engage In "Just For Us" Engineering Which Enables ILECs To Discriminate Against CLECs By Reducing the Inventory of Dark Fiber That Is Deemed "Available" to CLECs While Ensuring That the Same Fiber Is Available To Serve the ILEC's Own Customers

Additionally, SBC and other ILECs typically splice and terminate only the fibers needed to support their own demand for services and leave the remaining fibers unterminated and unspliced for future use.[182] For example, when SBC deploys fiber optic cable in the field between a Central Office and a building, it regularly designs breaks in the path at various points.[183] Fiber is routinely laid in fiber segments, not one long continuous piece of fiber from one building to the next.[184] The larger cables called backbone fiber cables, traverse main routes between wire centers or through high-volume corridors, and these backbone cables are connected to smaller distribution cables that serve individual customer locations.[185] The connections between the backbone and distribution cables are established by splicing strands from one cable to those of the other cable at a splice case.[186] In most situations in which SBC wants to provide

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180 Exhibit-05, Passmore Direct Testimony, at 18.

181 Exhibit-08, *Petition of El Paso Networks, LLC For Arbitration Of An Interconnection Agreement With Southwestern Bell Telephone Company*, Docket No. 25188, Rebuttal Testimony of Chad Townes, at _ (TX PUC, March 8, 2002) ("Townes Rebuttal Testimony").

182 Exhibit-05, Passmore Direct Testimony, at 6, 11-12, 17-18.

183 Exhibit-05, Passmore Direct Testimony, at 6.

184 *Id.*

185 *Id.*

186 Exhibit-05, Passmore Direct Testimony, at 6-7.

additional capacity to its customers, or initiate fiber services to a customer that is served by SBC's existing distribution network, it must close these mid-span breaks by connecting, or splicing, two fibers together.[187] Such splicing enables the existing fiber route to carry continuous transmission of light and therefore to support the provision of telecommunications services.

SBC uses these "just in time" engineering practices to splice only the precise number of strands that are needed to meet its customer demand.[188] When SBC calls into service a new fiber route, or additional strands on an existing route, only then will it splice and terminate for service the necessary strands.[189] SBC leaves dark loop dark fiber unspliced and unterminated because it does not know in advance which of several distribution cables will need the unused capacity as a result of customer demand.[190]

While such "just in time" engineering practices are reasonable, SBC's "*just for us*" implementation of these "just in time" engineering practices is patently discriminatory and unreasonable contrary to Section 251(c)(3) of the Act and the Commission's existing unbundling rules. SBC's policy amounts to "just for us" engineering because it refuses to perform the necessary splicing for a CLEC or to allow the CLEC to perform the splicing itself, while routinely performing such splicing for itself and affiliates to serve its own customers.[191] SBC's "just for us" engineering practices deprive CLECs of the ability to utilize a significant percentage

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187 Exhibit-05, Passmore Direct Testimony, at 7.

188 *See, e.g.,* Exhibit-05, Passmore Direct Testimony, at 11.

189 Exhibit-08, Townes Rebuttal Testimony.

190 Exhibit-05, Passmore Direct Testimony, at 11.

191 Exhibit-05, Passmore Direct Testimony, at 11-12, 19 Exhibit-08, Townes Rebuttal Testimony.

of available[192] dark fibers, while SBC itself routinely employs the same dark fiber to service its own customers.[193] Such "just for us" engineering practices enable ILECs to deliberately reduce the dark fiber inventory that is available to CLECs by leaving dark fiber unspliced and unterminated until it is needed to meet the near term demand of their customers. In fact, SBC admits that "as retail customers request services," and typically no sooner, SBC performs splicing "to complete the path between the backbone and the customer premises."[194]

As demonstrated above, CLECs are critically dependent upon such ILEC dark fiber in the intracity market for local connections. While in some cases third-party carriers offer dark fiber facilities on long-haul routes, the ILEC is most often the only carrier in its region with a deployed, or "last mile," distribution fiber network. In Texas, for example, SBC is the only source from which EPN can obtain local fiber distribution in a cost-effective manner.[195] EPN's preference, where economically viable, is to deploy its own fiber, and EPN has deployed hundreds of fiber miles in the state of Texas where it operates.[196] However, it is impossible for EPN, or any CLEC in the near term to duplicate the ubiquitous fiber network that SBC has constructed, utilizing rate payer dollars earned during its monopoly era. Accordingly, the ability

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192 Internally, SBC treats dark fiber as deployed fiber, regardless of whether the facility would need to be spliced in order to be called into service. For example, these fibers are recorded as deployed on SBC's Plant Layout Records database , which is used to identify facilities that can easily be called into service. Also, these dark fiber facilities are recorded as deployed in SBC's Job Management Operating System, which is tied to the property and tax databases SBC uses to identify deployed assets. Exhibit-12, Declaration of Patricia Hogue, at ¶ 6.

193 Exhibit-05, Passmore Direct Testimony, at 19.

194 Exhibit-08, Townes Rebuttal Testimony.

195 *See, e.g.,* Exhibit-05, Passmore Direct Testimony, at 10.

196 Exhibit-05, Passmore Direct Testimony, at 8.

of CLECs to provides services is materially diminished if ILECs are not required to splice dark fiber.

In sum, in light of the analysis of the MA DTE, RI PUC, and DC PSC, and the fact that ILECs routinely splice dark fiber to serve their own customers, the Commission should clarify its existing definition of dark fiber loops and transport to make it clear that ILECs are required to provide access to dark fiber at any technically feasible point including splice points as well as hard termination points, and at intermediate offices without requiring a CLEC to collocate at an intermediate office.

4. The Commission Should Clarify That ILECs Are Required To Splice Dark Fiber Along "Other Than Normal" Routes As Well As "Primary" Routes

Recently, SBC devised a new method for excluding unlit fiber from its inventory of unbundled dark fiber available to CLECs. SBC now intentionally excludes unlit fiber from its inventory of dark fiber available to CLECs, by creating an arbitrary distinction between a normal or primary route and an alternate route (or, in SBC's terminology, a "Route Other Than Normal" – "ROTN").[197] In its latest ruse to evade its unbundling obligations, SBC now considers fiber unavailable to CLECs as unbundled dark fiber on routes it deems "other than normal."[198] In fact, if a CLEC submits a dark fiber inquiry and no spare fiber is available along the primary route, then SBC will reject the dark fiber inquiry for "no facilities" even though dark fiber is available along a so-called "other than normal" route that connects the same A point and Z points which

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[197] Exhibit-07, *Petition of El Paso Networks, LLC For Arbitration Of An Interconnection Agreement With Southwestern Bell Telephone Company*, Docket No. 25188, Direct Testimony of Patricia M. Hogue, at 5, 7 (TX PUC, March 8, 2002) ("Hogue Direct Testimony").

[198] Exhibit-07, Hogue Direct Testimony, at 5, 7-10.

may or may not go through intermediate offices. In fact, SBC will not even inform CLECs that such "other than normal" routes are present in its response to the CLEC's dark fiber inquiry. Of course, SBC routinely splices and terminates dark fiber along such other than normal routes to make fiber available for itself in order to serve its customers, affiliates or subsidiaries.[199] SBC will not provide this information to CLECs.

SBC has most often applied the ROTN designation to fiber loops. In this manner, SBC limits the definition of an unbundled "loop" to only those facilities that connect a customer directly to its primary or "serving" central office, and argues that any other facility or fiber segment between a customer location and a wire center other than the so-called primary wire center is not within the definition of a "loop" for the purposes of unbundling to CLECs.[200] In fact, there have been instances in which fiber was not deployed between the primary wire center and a customer premise, however, fiber was deployed between another wire center and the customer premise.[201] Under SBC's policies, the fiber along this other route would not be available to a CLEC as an unbundled network element.

SBC maintains that "loops" along routes that SBC has arbitrarily characterized as "other than normal routes" are not required to be unbundled in order to reduce the total inventory of loops available to CLECs and to undermine a CLEC's ability to offer route diversity to its customers.[202] The Commission's definition of an unbundled loop, however, makes no

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199 Exhibit-05, Passmore Direct Testimony, at 17; Exhibit-07, Hogue Direct Testimony, at 5, 7-10; Exhibit-12, Declaration of Patricia Hogue, at ¶ 4.

200 Exhibit-07, Hogue Direct Testimony, at 3, 5, 7-10.

201 *Id.*

202 Exhibit-07, Hogue Direct Testimony, at 5, 7.

distinction regarding the particular ILEC central office from which a loop originates.[203] It simply states that a loop is a "transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises."[204] Contrary to SBC's position, nothing in the Act or the Commission's rules limits SBC's obligation to unbundle network elements according to serving wire centers. The FCC's rules make it clear that a loop is a loop. The definition of unbundled dedicated transport in the FCC's rules similarly supports a finding that EPN may obtain any transport facility as a UNE, regardless of whether SBC deems it a "primary" route.[205]

SBC also contends that CLECs may not obtain unbundled loop and transport facilities from diverse central offices and loops on diverse paths back to the same central office, notwithstanding the fact that SBC has the ability to choose the number and location of the routes and alternate routes it uses to serve its customers.[206] SBC's policies are not consistent with the Commission's definitions of these network elements and unlawfully impair a CLEC's ability to obtain all the features, functions, and capabilities of these network elements including network redundancy and diversity that SBC offers to its customers.[207]

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203 Exhibit-07, Hogue Direct Testimony, at 2, 8.

204 47 C.F.R. § 51.319(a)(1).

205 *See* 47 C.F.R. § 51.319(d)(1)(A). The rule states: "Dedicated transport, defined as incumbent LEC transmission facilities, including all technically feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, dedicated to a particular customer or carrier, that provide telecommunications between wire centers owned by incumbent LEC's [sic] or requesting telecommunications carriers, or between switches owned by incumbent LEC's [sic] or requesting telecommunications carriers."

206 *See, e.g.*, Exhibit-07, Hogue Direct Testimony, at 3.

207 Exhibit-07, Hogue Direct Testimony, at 3, 5, 7-10.

In sum, SBC's policies are clearly discriminatory and violate this Commission's rules which make no distinction between primary and "other than normal" routes in defining unbundled loops and transport, and do not preclude CLECs from ordering UNEs to establish diverse paths. Accordingly, the Commission should modify its existing rules to clarify that such practices are unlawful. More specifically, the Commission should clarify that ILEC's obligated to provide "nondiscriminatory" access to unbundled high capacity and dark fiber loops, sub-loops and transport regardless of whether the ILEC deems the loop or transport path a primary or alternate ("other than normal") route, and regardless of whether a CLEC has obtained other loops or transport from a particular location in order to provide facility diversity to its customers.

B. The Commission Should Clarify That ILECs Are Required Provision To CLECs Dark Fiber that is Not Currently Terminated at Both Ends

ILECs have argued that dark fiber that is not terminated at both ends does not meet the Commission's definition of unbundled dark fiber and need not be made available to CLECs as a UNE. For example, as a matter of general policy, Verizon considers fiber that is not terminated at both ends and completely spliced to be "under construction" and not part of the dark fiber inventory available to CLECs.[208] Further, Verizon admitted that when Verizon constructs and installs fiber routes, the fiber is not inventoried and is not available to CLECs until it is terminated at both ends along the route.[209] Verizon admitted that it would respond to a CLEC inquiry that dark fiber was unavailable along the requested route, even if, under Verizon's existing construction plan the requested fiber span was a mere two weeks away from completion,

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208 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 Tr. at 257:13-18.

209 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 257:13-18.

resulting in significant new capacity along the requested fiber span.[210] Verizon's refusal to consider these unterminated fibers as part of its inventory results in Verizon grossly understating the amount of dark fiber that should be characterized by Verizon as "available" to requesting CLECs as UNEs.[211] Such fiber may readily be made usable by Verizon,[212] and should be considered usable by CLECs. Moreover, while such dark fiber is available to Verizon, Verizon does not count fiber that is not terminated at both ends in calculating how much dark fiber it may reserve for maintenance and other purposes, resulting in excessive quantities of "reserved" fibers that are available to Verizon with little effort but not available to CLECs.[213]

As discussed above, termination of fiber frequently requires some splicing. In particular, ILECs routinely perform a fusion splice to connect a fiber pigtail to a fiber cable in a splice tray within the central office in order to terminate the fiber cable at a fiber distribution panel.[214] This type of splicing is routinely performed in a controlled environment by ILECs to serve their own customers and should be performed to terminate dark fiber in order to provide dark fiber loops and transport to CLECs.[215] Such splicing does not implicate any network reliability issues as evidenced by the fact that ILECs routinely perform such splicing for themselves. Unless ILECs

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210 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 Tr. at 267:4-15.

211 Exhibit CTC-01, CTC Declaration, at ¶ 23; Feb. 7, 2002 Tr. at 6:20-7:4, 19:1-10.

212 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 257:19-22, 263:9-24, 265:7-16 ((Commissioner Diamond) "But to the extent you have cable sitting there that is all the way connected other than - - run all the way, other than connected at the ends, that conceivably would be available to Verizon but not to a CLEC? (Mr. Albert) Theoretically."), 269:1-14 ((Mr. Albert) "our salespeople can always call our engineers and check on the status of what's going on in the network.").

213 Exhibit-06, Maine Section 271 Transcript, Jan. 29, 2002 Tr. at 257:13-18.

214 Exhibit-12, Declaration of Patricia Hogue, at ¶ 4.

215 Exhibit-12, Declaration of Patricia Hogue, at ¶ 4; Exhibit-05, Passmore Direct Testimony, at 14, 19.

are required to perform such splicing for CLECs in order to terminate dark fiber, they can deliberately leave dark fiber that has been pulled within or lies just outside the central office unspliced and unterminated in order to reduce the dark fiber inventory that is available to CLECs.

The DC PSC recently rejected Verizon's policy regarding unterminated and unspliced dark fiber and concluded that unlit fiber that is not attached at both ends is within the scope of the dark fiber UNE and should be included in Verizon's dark fiber UNE inventory that is made available to CLECs. More specifically, the DC PSC rejected Verizon's argument that such unattached dark fiber is under construction and therefore should not be part of Verizon's dark fiber UNE inventory.[216] The DC PSC concluded that "it is clear that unattached dark fiber is *already installed in the network before it is attached* to termination equipment, and easily called into service by the attachment of termination equipment."[217] The DC PSC expressly rejected Verizon's argument that requiring it to attach termination equipment to unattached dark fiber for CLECs would result in the creation of a superior network. The D.C. commission concluded that:

> The *UNE Remand Order* includes unattached dark fiber in its definition of dark fiber, since it is deployed in Verizon's network and is easily called into service. It is also analogous to 'dead count' or 'vacant' copper, which the FCC required to be unbundled. The Commission chooses to follow the Indiana Commission's decision in permitting [CLECs] to have access to unattached dark fiber. Approval of [the CLEC's] position *does not require Verizon to create a superior quality network, since it merely permits [the CLEC] to have the same access to dark fiber that Verizon provides to itself.*[218]

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216 *DC Dark Fiber Order*, at ¶¶ 26, 33.

217 *DC Dark Fiber Order*, at ¶ 26 (emphasis added).

218 *DC Dark Fiber Order*, at ¶ 33 (emphasis added).

Like Verizon, SBC has argued that requiring it to provide unbundled access to unterminated dark fiber is tantamount to requiring it to construct new facilities for CLECs which SBC claims it is not required to do.[219] SBC has also argued that unterminated fiber does not meet the Commission's definition of unbundled dark fiber because it is not easily called into service and does not connect two points in the network.[220] However, the Texas Public Utilities Commission rejected SBC's arguments and held that "dark fiber which is deployed but not yet terminated can easily be called into service" and falls within the Commission's definition of the dark fiber UNE.[221] Further, the TX PUC concluded that "terminating dark fiber does not constitute constructing new" facilities.[222] Notwithstanding the TX PUC's rejection of SBC's arguments that fiber that is "under construction" because a relatively minor task such as termination has not been completed, SBC continues to evade its unbundling obligations by refusing to make dark fiber available to CLECs until the completion of the job is entered into its Plant Location Records ("PLRs"). As a result to this policy, fiber could be available, spliced end-to-end, and terminate, yet because the completion of the job is not recorded in the PLRs, SBC insists that the dark fiber is not available to CLECs for unbundling.[223]

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219 *Joint Petition of COSERV, L.L.C. d/b/a COSERV Communications, et al. For Arbitration of Interconnection Rates, Terms, Conditions, and Related Arrangements with Southwestern Bell Telephone Company*, Docket No. 23397, Arbitration Award, at 114 (Texas PUC April 17, 2001). ("*COSERV Arbitration*").

220 *COSERV Arbitration*, at 109, and 113.

221 *COSERV Arbitration*, at 113.

222 *COSERV Arbitration*, at 114.

223 Exhibit-09, *Petition of El Paso Networks, LLC For Arbitration Of An Interconnection Agreement With Southwestern Bell Telephone Company*, Docket No. 25188, Direct Testimony of Teo Galvan, at 15-17 (TX PUC, March 8, 2002) ("Galvan Direct Testimony").

By attempting to exclude unterminated dark fiber from the inventory of dark fiber that is available to CLECs, both Verizon and SBC hope to evade their obligations to provide unbundled dark fiber. The Commission should preclude this unlawful conduct by clarifying that the definition of unbundled loop, subloop and transport dark fiber includes fiber that is deployed in the network but not yet terminated.

C. The Commission Should Require ILECs to Take Reasonable Steps to Make Dark Fiber Available by Grooming Fibers

During the Maine 271 proceeding, Verizon witness Donald Albert admitted that, through the grooming process, it would be possible to free up fibers on dark fiber segments where fibers were unavailable in order to fill a CTC order for dark fiber.[224] For example, through the use of electronics, up to four fibers that were each providing service at an OC-12 level could be groomed onto a single OC-48, freeing up the other three fibers for other uses.[225] Mr. Albert admitted that Verizon sometimes engages in such grooming to free up fibers for its own customers, but stated that it did not do so to free up fibers for a CLEC requesting dark fiber.[226] The fact that Verizon sometimes engages in this type of grooming for its own purposes but does not do so for CLECs reflects an unlawful discrimination that helps facilitate Verizon's hoarding of dark fiber for itself. In order to preclude such unlawful discrimination and reduce the impairment faced by CLECs, the Commission should supplement its existing rules to require ILECs to perform such grooming to make dark fiber available to CLECs. In fact, an arbitrator in

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224 Exhibit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 239:11-240:11, 241:6-242:3.

225 Exhibit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 240:1-7.

226 Exhibit-06, Maine 271 Transcript, Jan. 29, 2002 at 241:17-23.

New Hampshire recently concluded that Verizon should perform such grooming for CTC in order to make dark fiber transport UNEs available to CTC.[227] Accordingly, the Commission should adopt this "best practice" and require ILECs to groom fiber to provide dark fiber to CLECs as part of the Commission's national unbundling rules.

D. ILECs Should Be Required to Establish a Parallel Processing System for Simultaneous Processing of Dark Fiber and Collocation Orders in Order to Avoid an Unreasonable Catch-22 Type Situation

Verizon, SBC and possibly other ILECs will not permit a CLEC to reserve dark fiber after an inquiry indicates that dark fiber is available along the CLEC specified route.[228] For example, Verizon will only accept a dark fiber order when the dark fiber can be delivered to a circuit facility assignment ("CFA") at a collocation arrangement.[229] Accordingly, dark fiber can only be ordered after a CLEC's collocation arrangement has been "augmented" by Verizon to provide fiber terminations. However, the augmentation takes months to complete. By the time the augment is completed, there is no guarantee that the dark fiber identified in the response to the CLEC inquiry will be available.[230] Verizon will not permit the CLEC to reserve the dark fiber while the augment is under construction. Instead, Verizon insists that it retain the right to assign the dark fiber to itself or others during the time the augment is under construction. This

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227 N.H. Docket No. DT 02-028, Dark Fiber Arbitration, Arbitrator's Report and Recommendation, at 4-6 (March 1, 2002) ("The Arbitrator recommends that the Commission order Verizon to provision CTC's request for two dark fiber strands between Dover and Manchester by one of the three methods outlined above.").

228 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 226:15-22.

229 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 226:4-22.

230 Exhbit-06, Maine Section 271 Transcript, Jan. 29, 2002 at 226:23-227:5 ("So if CTC put in an order for collocation and spent the money to collocate in Raymond and Exeter, it might find that when the collocation was completed, somebody else had snapped up the four or five fibers between Exeter and New Market, for example, it would have two collocations that would be of no use, correct? (Ms. Detch) Correct.").